

... T R G L₁₃ L₁₄ G C I₁₇ I₁₈ T S L₂₁ T ...

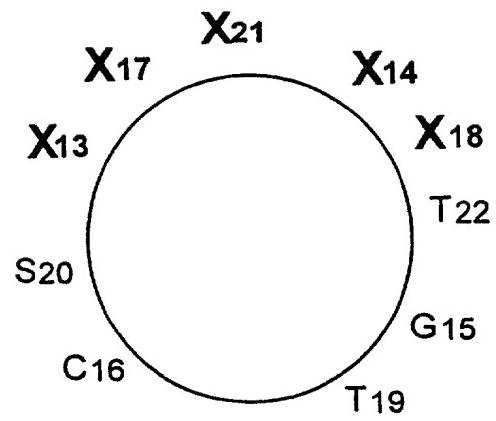
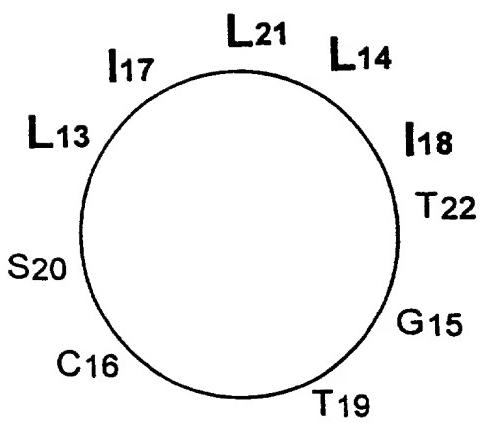


FIG. 1

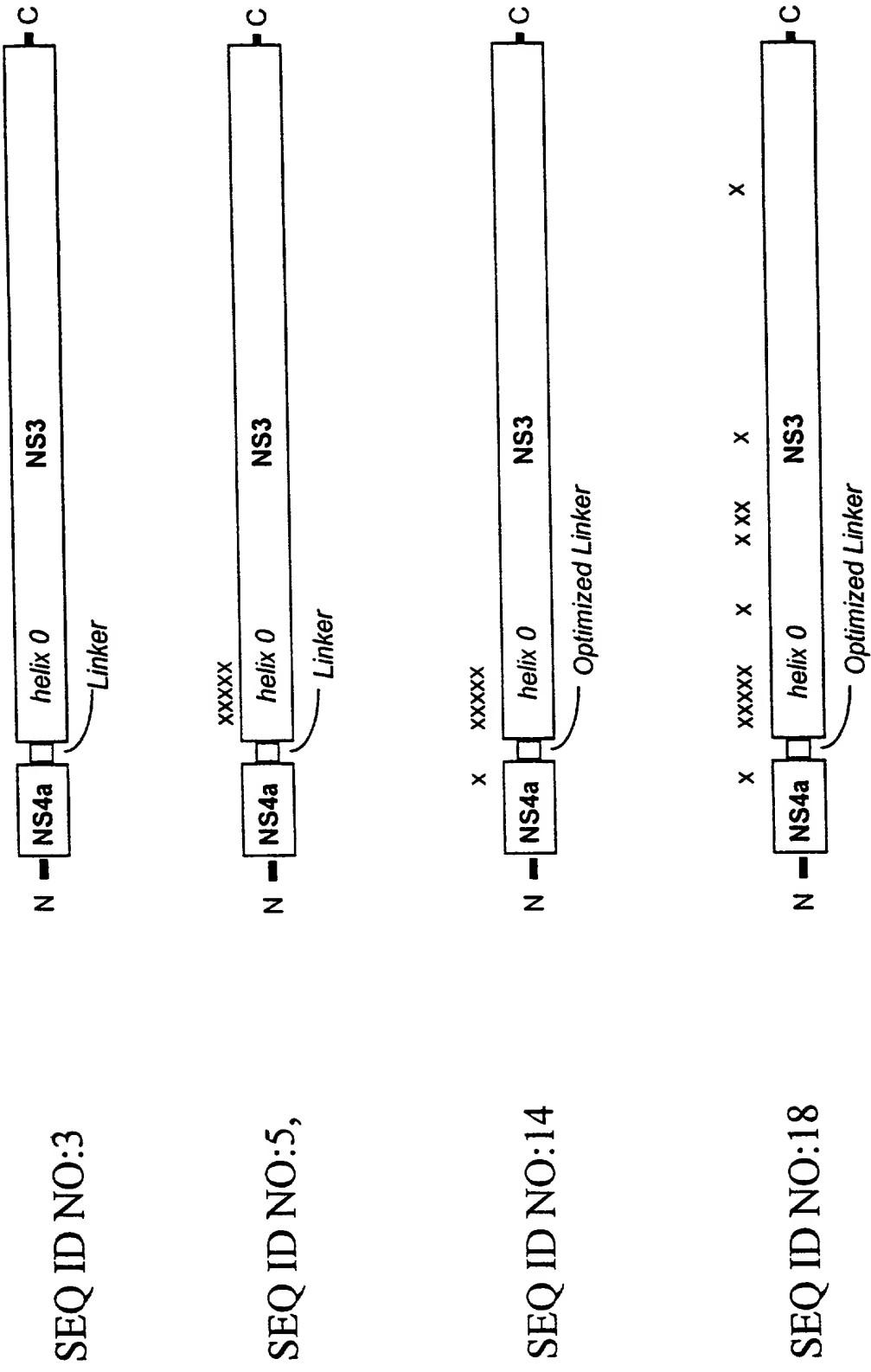


FIG. 2

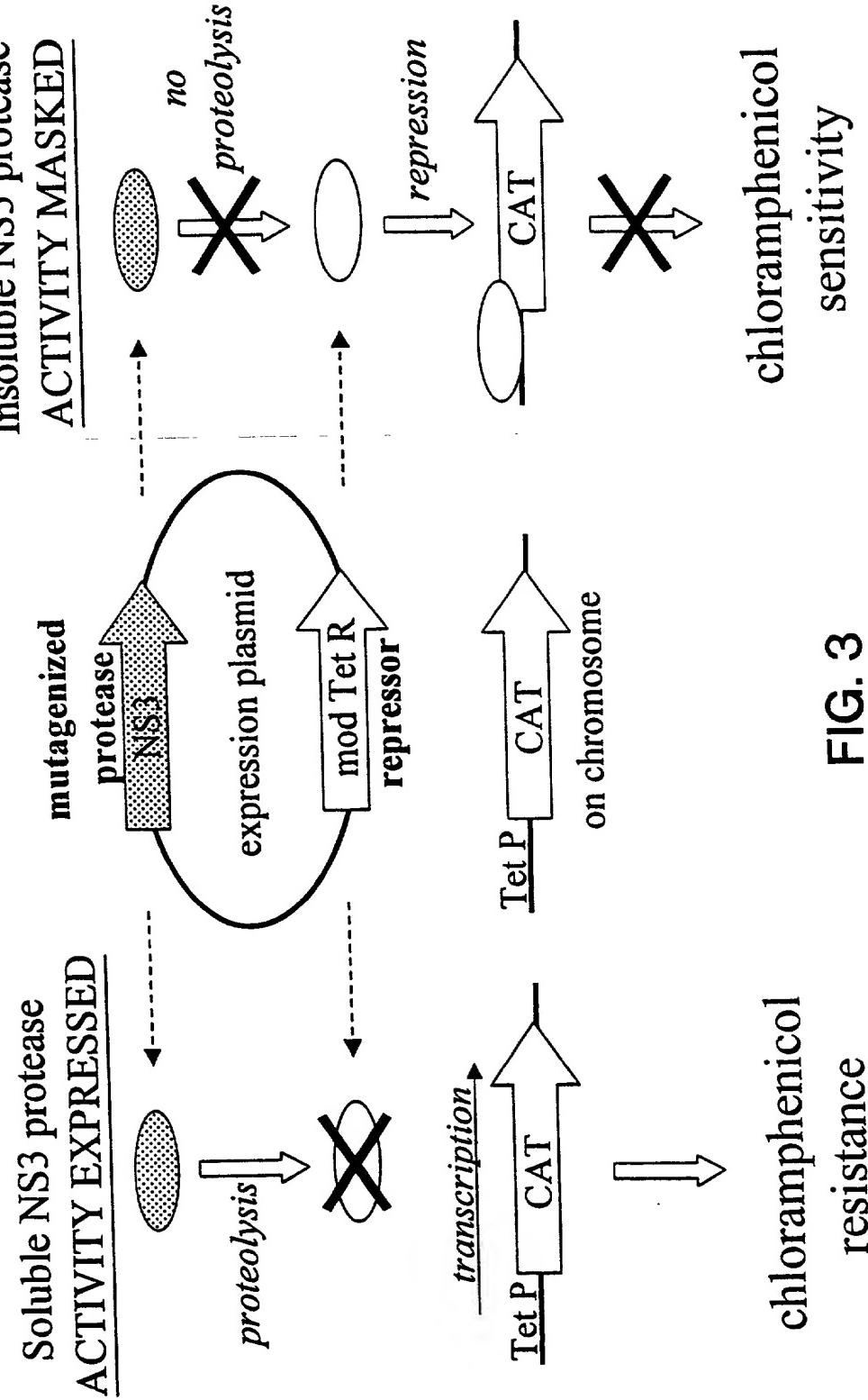


FIG. 3

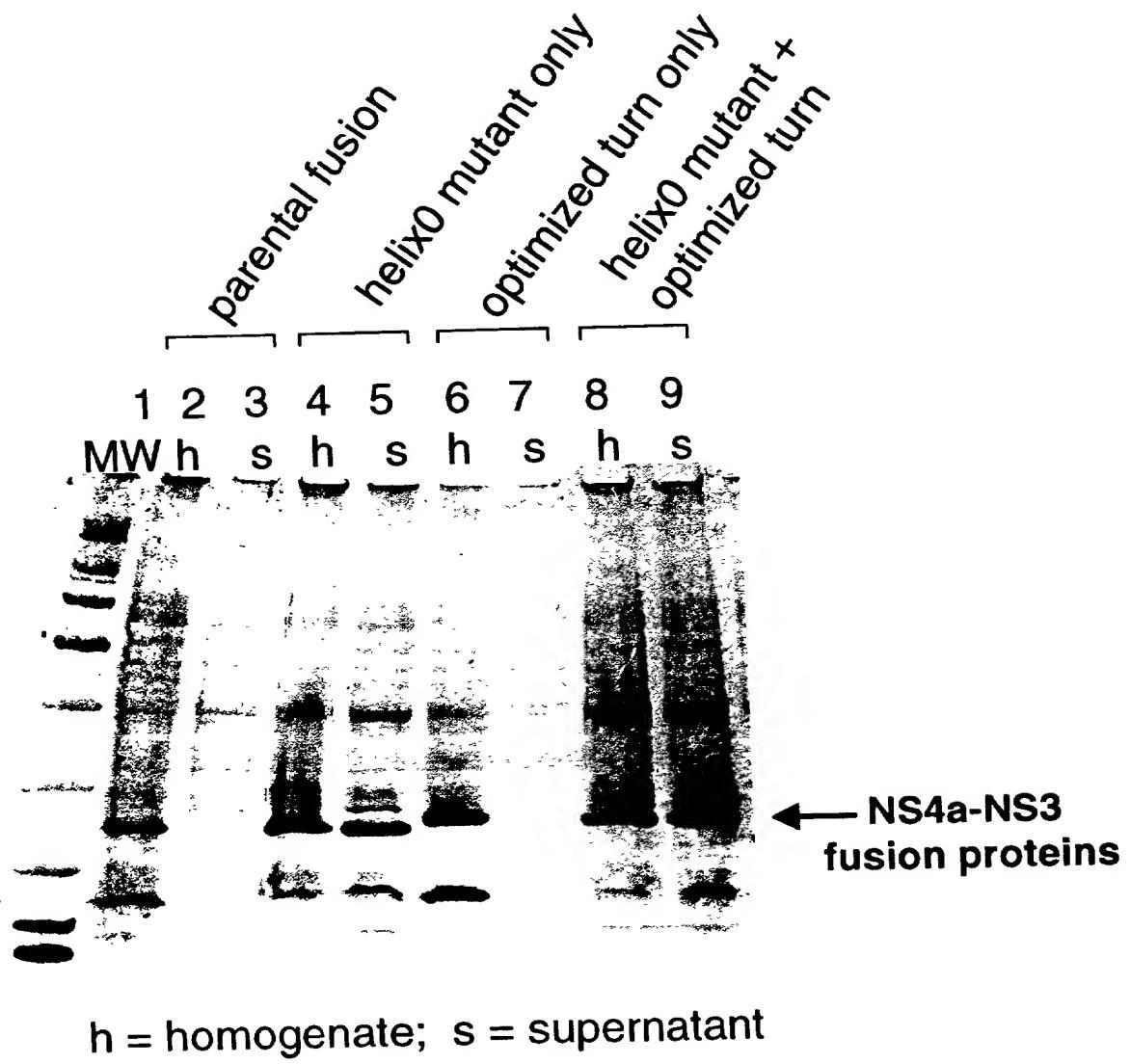


FIG. 4

0102030405060708090A0B0C0D0E0F0

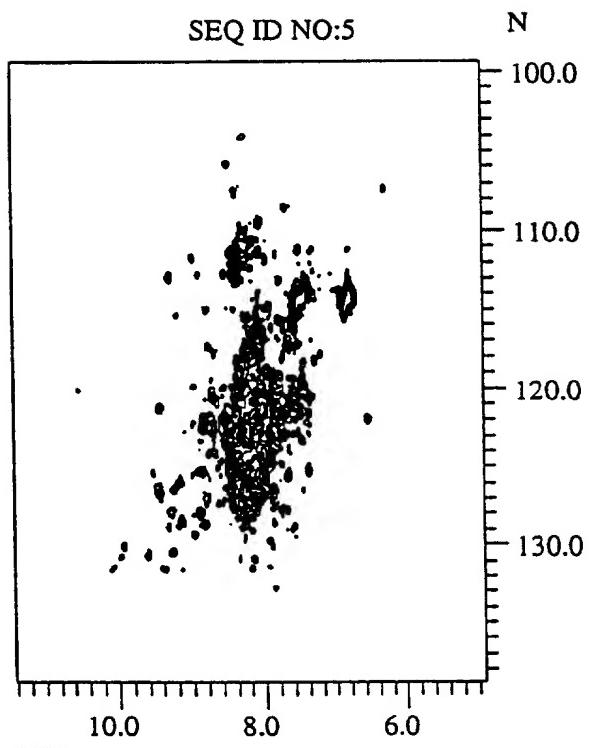


FIG. 5A

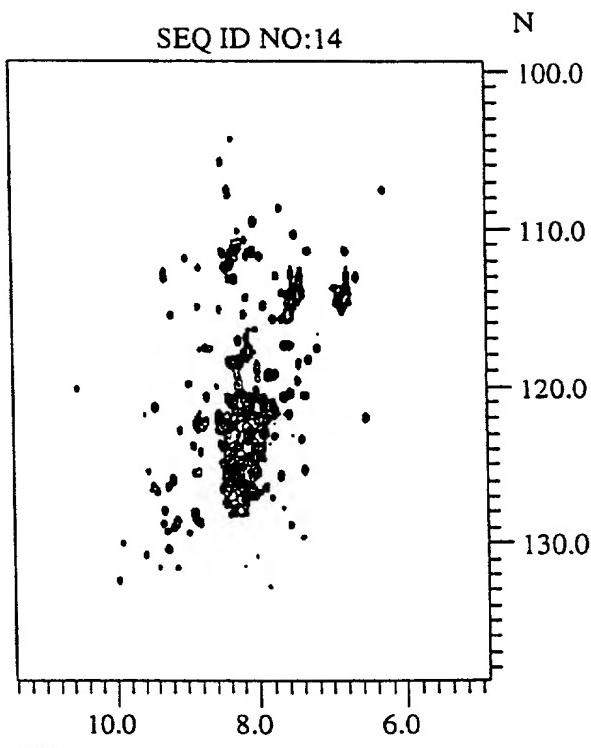


FIG. 5B

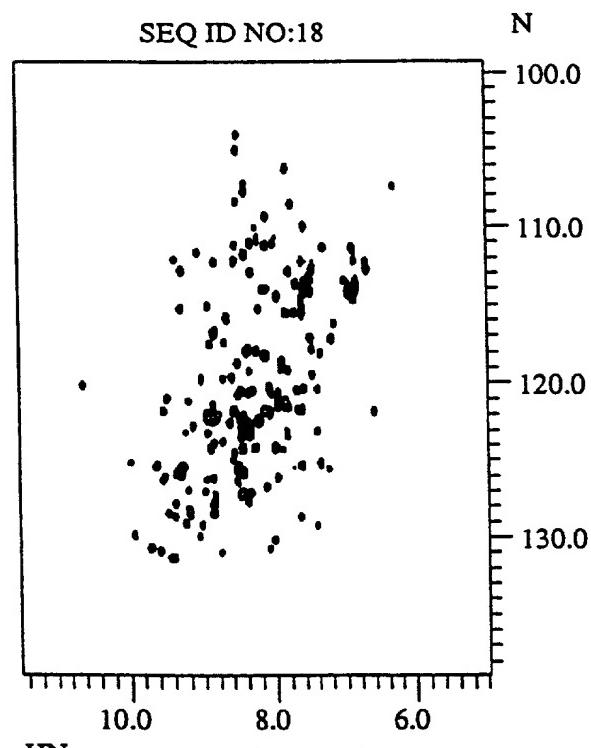


FIG. 5C

FIG. 6

Seq	ID	NO : 1	1	2	3	4	5	6
Seq	ID	NO : 3	5	0	0	0	0	0
Seq	ID	NO : 12						
Seq	ID	NO : 14	-MAPITAYAQQTTRGLGCIIITSLTGRDKNQVEGEVQIVSTAQAQTLFLATCINGVCWTVYHAGTIA					
Seq	ID	NO : 16	MKKRGSVVIVGRIVL-NG-AYAQQTRGLGCIIITSLTGRDKNQVEGEVQIVSTAQAQTLFLATCINGVCWTVYHAGTIA					
Seq	ID	NO : 18	MKKRGSVVIVGRIVL-NG-AYAQQTRGEEGCOETSQTGRDKNQVEGEVQIVSTAQAQTLFLATCINGVCWTVYHAGTIA					
Seq	ID	NO : 20	MKKRGSVVIVGRIVL-MKKRGSVVIVGRIVL-NG-AYAQQTRGEEGCOETSQTGRDKNQVEGEVQIVSTAQAQTLFLATCINGVCWTVYHAGTIA					
Seq	ID	NO : 22	MKKRGSVVIVGRIVL-MKKRGSVVIVGRIVL-NG-AYAQQTRGEEGCOETSQTGRDKNQVEGEVQIVSTAQAQTLFLATCINGVCWTVYHAGTIA					
Seq	ID	NO : 24	MKKRGSVVIVGRIVL-NG-AYAQQTRGLGCIIITSLTGRDKNQVEGEVQIVSTAQAQTLFLATCINGVCWTVYHAGTIA					
Seq	ID	NO : 1	7	8	9	1	1	1
Seq	ID	NO : 3	0	0	0	0	2	4
Seq	ID	NO : 12						
Seq	ID	NO : 14	SPKGPVIQMYTNVDKDLVLGWPAPQGSRSLLTPCTCGSSDLYLVLTRHADVIPVRRRGDSRGSLISPRPISYLKGSGGPLLC					
Seq	ID	NO : 16	SPKGPVIQMYTNVDKDLVLGWPAPQGSRSLLTPCTCGSSDLYLVLTRHADVIPVRRRGDSRGSLISPRPISYLKGSGGPLLC					
Seq	ID	NO : 18	SPKGPVIQMYTNVDKDLVLGWPAPQGSRSLLTPCTCGSSDLYLVLTRHADVIPVRRRGDSRGSLISPRPISYLKGSGGPLLC					
Seq	ID	NO : 20	SPKGPVIQMYTNVDKDLVLGWPAPQGSRSLLTPCTCGSSDLYLVLTRHADVIPVRRRGDSRGSLISPRPISYLKGSGGPLLC					
Seq	ID	NO : 22	SPKGPVIQMYTNVDKDLVLGWPAPQGSRSLLTPCTCGSSDLYLVLTRHADVIPVRRRGDSRGSLISPRPISYLKGSGGPLLC					
Seq	ID	NO : 24	SPKGPVIQMYTNVDKDLVLGWPAPQGSRSLLTPCTCGSSDLYLVLTRHADVIPVRRRGDSRGSLISPRPISYLKGSGGPLLC					
Seq	ID	NO : 1	1	6	7	1	1	1
Seq	ID	NO : 3	0	0	0	0	0	0
Seq	ID	NO : 12						
Seq	ID	NO : 14	PAGHAVGIFRAAVCTRGVAKAVDFIPVESLETTMRS--					
Seq	ID	NO : 16	PAGHAVGIFRAAVCTRGVAKAVDFIPVESLETTMRS--					
Seq	ID	NO : 18	PAGHAVGIFRAAVCTRGVAKAVDFIPVESLETTMRS--					
Seq	ID	NO : 20	PAGHAVGIFRAAVCTRGVAKAVDFIPVESLETTMRS--					
Seq	ID	NO : 22	PAGHAVGIFRAAVCTRGVAKAVDFIPVESLETTMRS--					
Seq	ID	NO : 24	PAGHAVGIFRAAVCTRGVAKAVDFIPVESLETTMRS--					

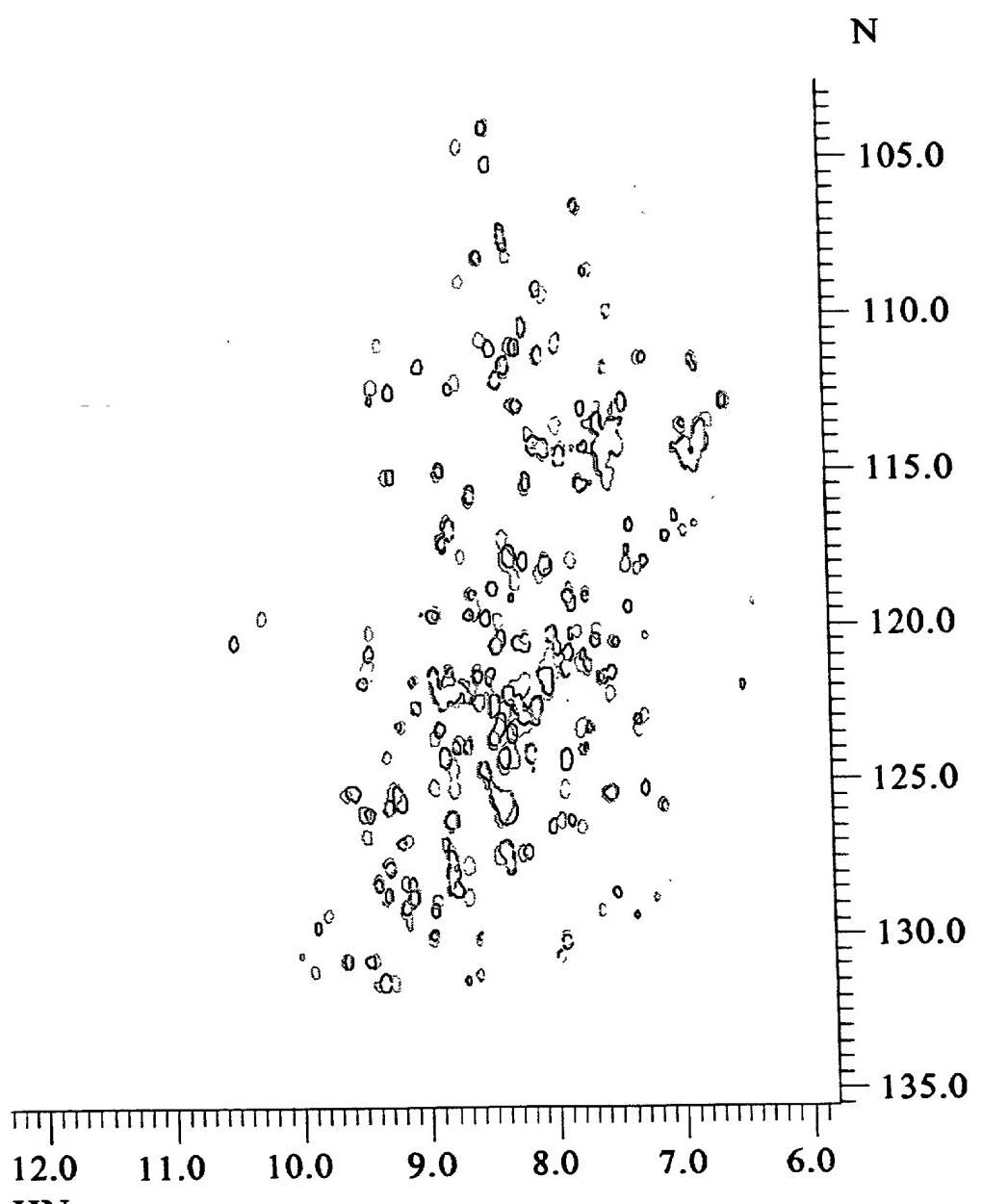


FIG. 7

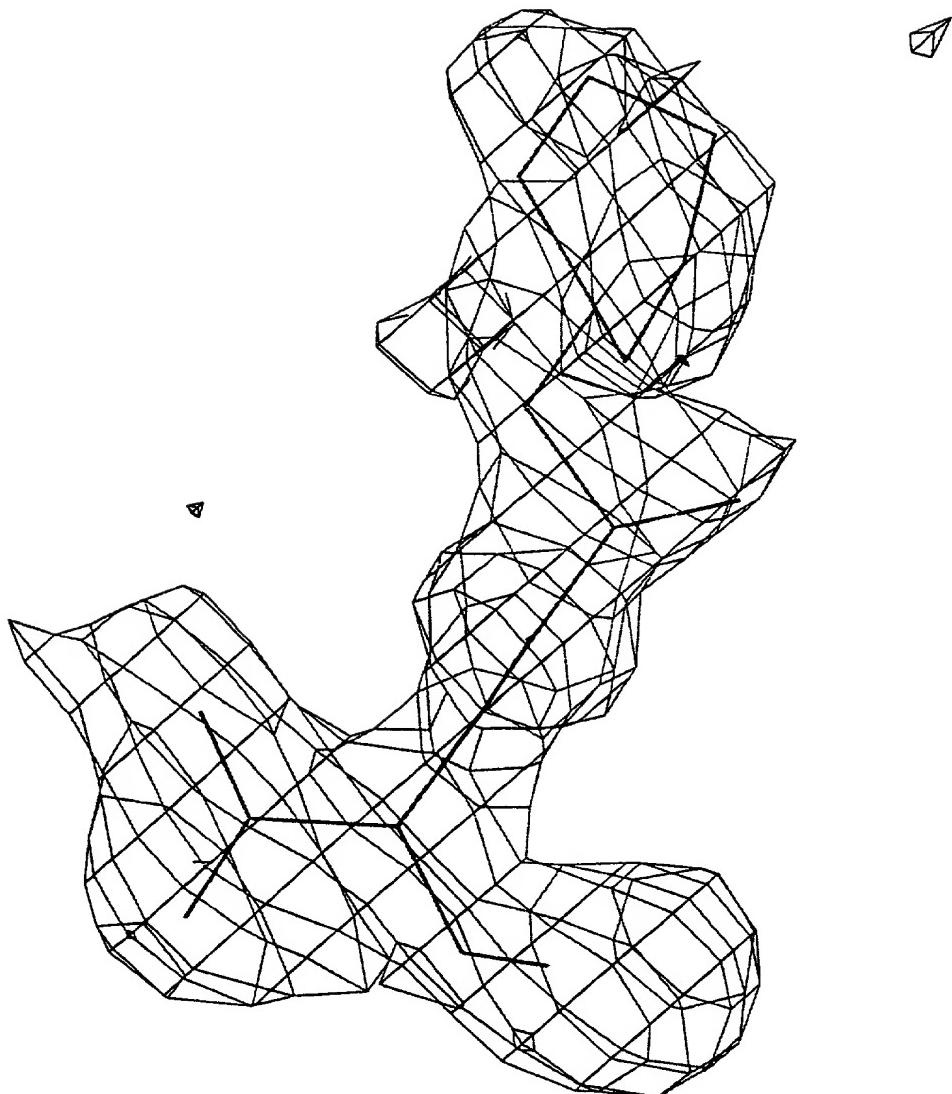


FIG. 8

1.00 A

M A P I T A Y A Q Q T R G L L G C I I T
 1 ATGGCTCCGAT CACCGCTTA CGCTCAGCAG ACCCGTGGTC TGCTGGTTG CATCATCAC
 TACCGAGGCT AGTGGCGAAT GCGAGTCGTC TGGGCACCAG ACGACCCAAC GTAGTAGTGG

S L T G R D K N Q V E G E V Q I V S T A
 61 TCCCTGACCG GTCGTGACAA AAACCAGGTT GAAGGTGAAG TTCAGATCGT TTCCACCGCT
 AGGGACTGGC CAGCACTGTT TTTGGTCCAA CTTCCACTTC AAGTCTAGCA AAGGTGGCGA

A Q T F L A T C I N G V C W T V Y H G A
 121 GCTCAGACCT TCCTGGCTAC CTGCATCAAC GGTGTTGCT GGACCGTTA CCACGGTGCT
 CGAGTCTGGA AGGACCGATG GACGTAGTTG CCACAAACGA CCTGGCAAAT GGTGCCACGA

G T R T I A S P K G P V I Q M Y T N V D
 181 GGTACCCGTA CCATCGCTTC CCCGAAAGGT CCGGTTATCC AGATGTACAC CAACGTTGAC
 CCATGGGCAT GGTAGCGAAG GGGCTTTCCA GGCCAATAGG TCTACATGTG GTTGCAACTG

K D L V G W P A P Q G S R S L T P C T C
 241 AAAGACCTGG TTGGTTGGCC GGCTCCGCAG GGTTCCCGTT CCCTGACCCC GTGCACCTGC
 TTTCTGGACC AACCAACCGG CCGAGGCGTC CCAAGGGCAA GGGACTGGGG CACGTGGACG

G S S D L Y L V T R H A D V I P V R R R
 301 GGTCCCTCCG ACCTGTACCT GGTTACCCGT CACGCTGACG TTATCCCGT TCGTCGTCGT
 CCAAGGAGGC TGGACATGGA CCAATGGCA GTGCGACTGC AATAGGGCCA AGCAGCAGCA

G D S R G S L L S P R P I S Y L K G S S
 361 GGTGACTCCC GTGGTCCCT GCTGCCCCG CGTCCGATCT CCTACCTGAA AGGTTCCCTCC
 CCACTGAGGG CACCAAGGG CAACAGGGGC GCAGGCTAGA GGATGGACTT TCCAAGGAGG

G G P L L C P A G H A V G I F R A A V C
 421 GGTGGTCCGC TGCTGTGCCG GGCTGGTCAC GCTGTTGGTA TCTTCCGTGC TGCTGTTGC
 CCACCAAGGGC ACGACACGGG CCGACCAAGTG CGACAACCAT AGAAGGCACG ACGACAAACG

T R G V A K A V D F I P V E S L E T T M
 481 ACCCGTGGTG TTGCTAAAGC TGTTGACTTC ATCCCGGTTG AATCCCTGGA AACCAACCATG
 TGGGCACCAC AACGATTTCG ACAACTGAAG TAGGGCCAAC TTAGGGACCT TTGGTGGTAC

R S *
 541 CGTCCCTGA
 GCAAGGACT

FIG. 9

M K K K G S V V I V G R I V L N G A Y A
 1 ATGAAAAAAA AAGGTTCCGT TGTTATCGTC GGCGTATAG TACTGAACGG TGCTTACGCT
 TACTTTTTT TTCCAAGGCA ACAATAGCAG CCGGCATATC ATGACTTGCC ACGAATGCGA

Q Q T R G L L G C I I T S L T G R D K N
 61 CAGCAGACTC GAGGTCTGCT GGGTTGCATC ATCACCTCCC TGACCGGTG TGACAAAAAC
 GTCGTCTGAG CTCCAGACGA CCCAACGTAG TAGTGGAGGG ACTGGCCAGC ACTGTTTTG

Q V E G E V Q I V S T A A Q T F L A T C
 121 CAGGTTGAAG GTGAAGTTCA GATCGTTCC ACCGCTGCTC AGACCTTCCT GGCTACCTGC
 GTCCAACCTC CACTTCAAGT CTAGCAAAGG TGGCGACGAG TCTGAAAGGA CCGATGGACG

I N G V C W T V Y H G A G T R T I A S P
 181 ATCAACGGTG TTTGCTGGAC CGTTTACCAAC GGTGCTGGTA CCCGTACCAT CGCTTCCCCG
 TAGTTGCCAC AAACGACCTG GCAAATGGTG CCACGACCAT GGGCATGGTA GCGAAGGGGC

K G P V I Q M Y T N V D K D L V G W P A
 241 AAAGGTCCGG TTATCCAGAT GTACACCAAC GTTGACAAAG ACCTGGTTGG TTGGCCGGCT
 TTTCCAGGCC AATAGGTCTA CATGTGGTTG CAACTGTTTC TGGACCAACC AACCGGCCGA

P Q G S R S L T P C T C G S S D L Y L V
 301 CCGCAGGGTT CCCGTTCCCT GACCCCGTGC ACCTGCGGTT CCTCCGACCT GTACCTGGTT
 GGCGTCCCAA GGGCAAGGG A CTGGGGCACG TGGACGCCAA GGAGGCTGGA CATGGACCAA

T R H A D V I P V R R R G D S R G S L L
 361 ACCCGTCACG CTGACGTTAT CCCGGTTCGT CGTCGTGGTG ACTCCCGTGG TTCCCTGCTG
 TGGGCAGTGC GACTGCAATA GGGCCAAGCA GCAGCACCAAC TGAGGGCAC AAGGGACGAC

S P R P I S Y L K G S S G G P L L C P A
 421 TCCCCCGCGTC CGATCTCCTA CCTGAAAGGT TCCTCCGGTG GTCCGCTGCT GTGCCCGGCT
 AGGGGCGCAG GCTAGAGGAT GGACTTCCA AGGAGGCCAC CAGGCGACGA CACGGGCCGA

G H A V G I F R A A V C T R G V A K A V
 481 GGTCAAGCTG TTGGTATCTT CCGTGCTGCT GTTTGCACCC GTGGTGTG TAAAGCTGTT
 CCAGTGCAC AACCATAGAA GGCACGACGA CAAACGTGGG CACCACAACG ATTCGACAA

D F I P V E S L E T T M R S P *
 541 GACTTCATCC CGGTTGAATC CCTGGAAACC ACCATGCGTT CCCCCGTGA
 CTGAAGTAGG GCCAACTTAG GGACCTTGG TGGTACGCAA GGGGCACT

FIG. 10

					L ₁₃	L ₁₄		I ₁₇	I ₁₈		L ₂₁					
Wild-type	(5)	Q	Q	T	R	G	L	L	G	C	I	I	T	S	L	T
Helix0-1	(6)	.	.	.	.	.	E	E	.	.	Q	E	.	.	Q	.
Helix0-3	(7)	.	.	.	.	.	E	E	.	.	Q	Q	.	.	E	.
Helix0-4	(8)	.	.	.	.	.	N	Q	.	.	E	K	.	.	E	.
Helix0-7	(9)	.	.	.	.	.	E	Q	.	.	Q	K	.	.	H	.
Helix0-8	(10)	.	.	.	.	.	E	Q	.	.	D	E	.	.	E	.
Helix0-10	(11)	.	.	.	.	.	E	E	.	.	E	Q	.	.	E	.

FIG. 11

M K K K G S V V I V G R I V L N G A Y A
 1 ATGAAAAAAA AAGGATCCGT TGTTATCGTC GGCGTATAG TACTAACGG TGCTTACGCT
 TACTTTTTT TTCCTAGGCA ACAATAGCAG CGGCATATC ATGACTTGCC ACGAATGCGA

 Q Q T R G E E G C Q E T S Q T G R D K N
 61 CAGCAGACTC GAGGTGAGGA GGGTTGCCAA GAAACCTCCC AGACCGGTG TGACAAAAAC
 GTCGTCTGAG CTCCACTCCT CCCAACGGTT CTTGGAGGG TCTGGCCAGC ACTGTTTG

 Q V E G E V Q I V S T A A Q T F L A T C
 121 CAGGTTGAAG GTGAAGTTCA GATCGTTCC ACCGCTGCTC AGACCTTCCT GGCTACCTGC
 GTCCAACCTTC CACTTCAAGT CTAGCAAAGG TGGCGACGAG TCTGGAAGGA CCGATGGACG

 I N G V C W T V Y H G A G T R T I A S P
 181 ATCAACGGTG TTTGCTGGAC CGTTTACAC GGTGCTGGTA CCCGTACCAT CGCTCCCCG
 TAGTTGCCAC AACGACCTG GCAAATGGTG CCACGACCAT GGGCATGGTA GCGAAGGGC

 K G P V I Q M Y T N V D K D L V G W P A
 241 AAAGGTCCGG TTATCCAGAT GTACACCAAC GTTGACAAAG ACCTGGTTGG TTGGCCGGCT
 TTTCCAGGCC AATAGGTCTA CATGTGGTG CAACTGTTTC TGGACCAACC AACCGGCCGA

 P Q G S R S L T P C T C G S S D L Y L V
 301 CCGCAGGGTT CCCGTCCCT GACCCCGTGC ACCTGGTGT CCTCCGACCT GTACCTGGTT
 GGCCTCCCAA GGGCAAGGGGA CTGGGGCACG TGGACGCCAA GGAGGCTGGA CATGGACCAA

 T R H A D V I P V R R R G D S R G S L L
 361 ACCCGTCACG CTGACGTTAT CCCGGTTCGT CGTCGTGGTG ACTCCCGTGG TTCCCTGCTG
 TGGGCAGTGC GACTGCAATA GGGCCAAGCA GCAGCACAC TGAGGGCACCC AAGGGACGAC

 S P R P I S Y L K G S S G G P L L C P A
 421 TCCCCGCGTC CGATCTCCTA CCTGAAAGGT TCCTCCGGTG GTCCGCTGCT GTGCCCGGCT
 AGGGGCGCAG GCTAGAGGAT GGACTTCCA AGGAGGCCAC CAGGCGACGA CACGGGCCGA

 G H A V G I F R A A V C T R G V A K A V
 481 GGTCACGCTG TTGGTATCTT CCGTGCTGCT GTTTGCACCC GTGGTGTG TAAAGCTGTT
 CCAGTGCAC ACCATAGAA GGCACGACGA CAAACGTGGG CACCACAACG ATTCGACAA

 D F I P V E S L E T T M R S P *
 541 GACTTCATCC CGGTGAATC CCTGGAAACC ACCATGCGTT CCCCGTGA
 CTGAAGTAGG GCCAACTTAG GGACCTTGG TGGTACGCAA GGGGCACT

FIG. 12

M K K K G S V V I V G R I N L S G D T A
 1 ATGAAAAAAA AAGGATCCGT TGTTATCGTC GGCGTATCA ACCTGTCCGG TGACACCGCT
 TACTTTTTT TTCCCTAGGCA ACAATAGCAG CGGGCATAGT TGGACAGGCC ACTGTGGCGA

Y A Q Q T R G E E G C Q E T S Q T G R D
 61 TACGCTCAGC AGACTCGAGG TGAGGAGGGT TGCCAAGAAA CCTCCCAGAC CGGTCGTGAC
 ATGCGAGTCG TCTGAGCTCC ACTCCTCCC ACGGTTCTT GGAGGGTCTG GCCAGCACTG

K N Q V E G E V Q I V S T A A Q T F L A
 121 AAAAACCAAGG TTGAAGGTGA AGTTCAAGATC GTTTCCACCG CTGCTCAGAC CTTCTGGCT
 TTTTGTCG AACTTCCACT TCAAGTCTAG CAAAGGTGGC GACGAGTCTG GAAGGACCGA

T C I N G V C W T V Y H G A G T R T I A
 181 ACCTGCATCA ACGGTGTTG CTGGACCGTT TACCACGGTG CTGGTACCCG TACCATCGCT
 TGGACGTAGT TGCCACAAAC GACCTGGCAA ATGGTGCCAC GACCATGGGC ATGGTAGCGA

S P K G P V I Q M Y T N V D K D L V G W
 241 TCCCCGAAAG GTCCGGTTAT CCAGATGTAC ACCAACGTTG ACAAAAGACCT GGTTGGTTGG
 AGGGGCTTTC CAGGCCAATA GGTCTACATG TGGTGCAAC TGTTCTGGA CCAACCAACC

P A P Q G S R S L T P C T C G S S D L Y
 301 CCGGCTCCGC AGGGTTCCCG TTCCCTGACC CCGTGCACCT GCGGTTCCCT CGACCTGTAC
 GGCGAGGCG TCCCAAGGGC AAGGGACTGG GGCACGTGGA CGCCAAGGAG GCTGGACATG

L V T R H A D V I P V R R R G D S R G S
 361 CTGGTTACCC GTCACGCTGA CGTTATCCCG GTTCGTCGTC GTGGTGAUTC CCGTGGTTCC
 GACCAATGGG CAGTGCAGACT GCAATAGGGC CAAGCAGCAG CACCACTGAG GGCACCAAGG

L L S P R P I S Y L K G S S G G P L L C
 421 CTGCTGTCCC CGCGTCCGAT CTCCCTACCTG AAAGGTTCCCT CCGGTGGTCC GCTGCTGTGC
 GACGACAGGG GCGCAGGCTA GAGGATGGAC TTTCCAAGGA GGCCACCAGG CGACGACACG

P A G H A V G I F R A A V C T R G V A K
 481 CCGGCTGGTC ACGCTGTTGG TATCTCCGT GCTGCTGTT GCACCCGTGG TGTTGCTAAA
 GGCGACCAAGG TGCGACAACC ATAGAAGGCA CGACGACAAA CGTGGGCACC ACAACGATTT

A V D F I P V E S L E T T M R S P *
 541 GCTGTTGACT TCATCCCGT TGAATCCCTG GAAACCACCA TGCCTCCCC GTGA
 CGACAACTGA AGTAGGGCCA ACTTAGGGAC CTTGGTGGT ACGCAAGGGG CACT

FIG. 13

M K K K G S V V I V G R I N L S G D T A
 1 ATGAAAAAAA AAGGATCCGT TGTTATCGTC GGCGTATCA ACCTGTCCGG TGACACCGCT
 TACTTTTTT TTCCTAGGCA ACAATAGCAG CCGGCATAGT TGGACAGGCC ACTGTGGCGA

Y A Q Q T R G E E G C Q E T S Q T G R D
 61 TACGCTCAGC AGACTCGAGG TGAGGAGGGT TGCCAAGAAA CCTCCCAGAC CGGTCGTGAC
 ATGCGAGTCG TCTGAGCTCC ACTCCTCCCA ACGGTTCTT GGAGGGTCTG GCCAGCACTG

K N Q V E G E V Q I V S T A T Q T F L A
 121 AAAAACCAAGG TTGAAGGTGA AGTTCAAGATC GTTCCACCG CTACCCAGAC CTTCCCTGGCT
 TTTTGGTCC AACTTCCACT TCAAGTCTAG CAAAGGTGGC GATGGGTCTG GAAGGACCGA

T C I N G V C W T V Y H G A G T R T I A
 181 ACCTGCATCA ACGGTGTTG CTGGACCGTT TACCACGGTG CTGGTACCCG TACCATCGCT
 TGGACGTAGT TGCCACAAAC GACCTGGCAA ATGGTGCCAC GACCATGGC ATGGTAGCGA

S P K G P V T Q M Y T N V D K D L V G W
 241 TCCCCGAAAG GTCCGGTTAC CCAGATGTAC ACCAACGTTG ACAAAAGACCT GGTTGGTTGG
 AGGGGCTTTC CAGGCCAATG GGTCTACATG TGGTTGCAAC TGTTCTGGA CCAACCAACC

Q A P Q G S R S L T P C T C G S S D L Y
 301 CAGGCTCCGC AGGGTTCCCG TTCCCTGACC CCGTGCACCT GCGGTTCTC CGACCTGTAC
 GTCCGAGGCG TCCCAAGGGC AAGGGACTGG GGCACGTGGA CGCCAAGGGAG GCTGGACATG

L V T R H A D V I P V R R R G D S R G S
 361 CTGGTTACCC GTCACGCTGA CGTTATCCCG GTTCGTCGTC GTGGTGACTC CCGTGGTTCC
 GACCAATGGG CAGTGCAGT GCAATAGGGC CAAGCAGCAG CACCACTGAG GGCACCAAGG

L L S P R P I S Y L K G S S G G P L L C
 421 CTGCTGTCCC CGCGTCCGAT CTCCCTACCTG AAAGGTTCCCT CCGGTGGTCC GCTGCTGTGC
 GACGACAGGG GCGCAGGCTA GAGGATGGAC TTTCCAAGGA GGCCACCAAGG CGACGACACG

P A G H A V G I F R A A V C T R G V A K
 481 CCGGCTGGTC ACGCTGTGG TATCTCCGT GCTGCTGTT GCACCCGTGG TGTTGCTAAA
 GGCCGACCAAGG TGCGACAACC ATAGAAGGCA CGACGACAAA CGTGGGCACC ACAACGATT

A V D F I P V E S L E T T M R S P *
 541 GCTGTTGACT TCATCCCGT TGAATCCCTG GAAACCACCA TGCCTTCCCC GTGA
 CGACAACTGA AGTAGGGCCA ACTTAGGGAC CTTGGTGGT ACGCAAGGGG CACT

FIG. 14

M K K K G S V V I V G R I N L S G D T A
 1 ATGAAAAAAA AAGGATCCGT TGTTATCGTC GGCGTATCA ACCTGTCCGG TGACACCGCT
 TACTTTTTT TTCCTAGGCA ACAATAGCAG CGGCATAGT TGGACAGGCC ACTGTGGCGA

Y A Q Q T R G E E G C Q E T S Q T G R D
 61 TACGCTCAGC AGACTCGAGG TGAGGAGGGT TGCCAAGAAA CCTCCCAGAC CGGTCGTGAC
 ATGCGAGTCG TCTGAGCTCC ACTCCTCCA ACGGTTCTT GGAGGGTCTG GCCAGCACTG

K N Q V E G E V Q I V S T A T Q T F L A
 121 AAAAACCAAGG TTGAAGGTGA AGTTCAAGATC GTTCCACCG CTACCCAGAC CTTCCCTGGCT
 TTTTGGTCC AACTCCACT TCAAGTCTAG CAAAGGTGGC GATGGGTCTG GAAGGACCGA

T S I N G V L W T V Y H G A G T R T I A
 181 ACCTCCATCA ACGGTGTTCT GTGGACCGTT TACCACGGTG CTGGTACCCG TACCATCGCT
 TGGAGGTAGT TGCCACAAGA CACCTGGCAA ATGGTGCCAC GACCATGGGC ATGGTAGCGA

S P K G P V T Q M Y T N V D K D L V G W
 241 TCCCCGAAAG GTCCGGTTAC CCAGATGTAC ACCAACGTTG ACAAAAGACCT GGTTGGTTGG
 AGGGGCTTTC CAGGCCAATG GGTCTACATG TGGTTGCAAC TGTTCTGGA CCAACCAACC

Q A P Q G S R S L T P C T C G S S D L Y
 301 CAGGCTCCGC AGGGTTCCCG TTCCCTGACC CCGTGCACCT GCGGTCCCTC CGACCTGTAC
 GTCCGAGGCG TCCCAAGGGC AAGGGACTGG GGACGTGGA CGCCAAGGAG GCTGGACATG

L V T R H A D V I P V R R R G D S R G S
 361 CTGGTTACCC GTCACGCTGA CGTTATCCCG GTTCGTCGTC GTGGTGAETC CCGTGGTTCC
 GACCAATGGG CAGTGCAGACT GCAATAGGGC CAAGCAGCAG CACCACTGAG GGCACCAAGG

L L S P R P I S Y L K G S S G G P L L C
 421 CTGCTGTCCC CGCGTCCGAT CTCCTACCTG AAAGGTTCCCT CCGGTGGTCC GCTGCTGTGC
 GACGACAGGG GCGCAGGCTA GAGGATGGAC TTTCCAAGGA GGCCACCAAGG CGACGACACG

P A G H A V G I F R A A V S T R G V A K
 481 CCGGCTGGTC ACGCTGTTGG TATCTTCCGT GCTGCTGTT CCACCCGTGG TGTTGCTAAA
 GGCCGACCAG TGCGACAACC ATAGAAGGCA CGACGACAAA GGTGGGCACC ACAACGATTT

A V D F I P V E S L E T T M R S P *
 541 GCTGTTGACT TCATCCCGT TGAATCCCTG GAAACCACCA TGCGTTCCCC GTGA
 CGACAACTGA AGTAGGGCCA ACTTAGGGAC CTTGGTGGT ACGCAAGGGG CACT

FIG. 15

M K K K G S V V I V G R I N L S G D T A
 1 ATGAAAAAAA AAGGATCCGT TGTTATCGTC GGCGTATCA ACCTGTCCGG TGACACCGCT
 TACTTTTTT TTCCTAGGCA ACAATAGCAG CCGGCATAGT TGGACAGGCC ACTGTGGCGA

Y A Q Q T R G E Q G C Q K T S H T G R D
 61 TACGCTCAGC AGACTCGAGG TGAGCAGGGT TGCCAGAAGA CCTCCCACAC CGGTCGTGAC
 ATGCGAGTCG TCTGAGCTCC ACTCGTCCC ACGGTCTTCT GGAGGGTGTG GCCAGCACTG

K N Q V E G E V Q I V S T A T Q T F L A
 121 AAAAACCAAGG TTGAAGGTGA AGTTCAGATC GTTCCACCG CTACCCAGAC CTTCCGGCT
 TTTTGGTCC AACTTCACT TCAAGTCTAG CAAAGGTGGC GATGGGTCTG GAAGGACCGA

T S I N G V L W T V Y H G A G T R T I A
 181 ACCTCCATCA ACGGTGTTCT GTGGACCGTT TACCACGGTG CTGGTACCCG TACCATCGCT
 TGGAGGTAGT TGCCACAAGA CACCTGGCAA ATGGTGCCAC GACCATGGGC ATGGTAGCGA

S P K G P V T Q M Y T N V D K D L V G W
 241 TCCCCGAAAG GTCCGGTTAC CCAGATGTAC ACCAACGTTG ACAAAAGACCT GGTTGGTTGG
 AGGGGCTTTC CAGGCCATG GGTCTACATG TGGTTGCAAC TGTTCTGGA CCAACCAACC

Q A P Q G S R S L T P C T C G S S D L Y
 301 CAGGCTCCGC AGGGTTCCCG TTCCCTGACC CCGTGCACCT GCGGTTCCCTC CGACCTGTAC
 GTCCGAGGCG TCCCAAGGGC AAGGGACTGG GGCACGTGGA CGCCAAGGAG GCTGGACATG

L V T R H A D V I P V R R R G D S R G S
 361 CTGGTTACCC GTCACGCTGA CGTTATCCCG GTTCGTCGTC GTGGTGACTC CCGTGGTTCC
 GACCAATGGG CAGTGCAGACT GCAATAGGGC CAAGCAGCAG CACCACTGAG GGCACCAAGG

L L S P R P I S Y L K G S S G G P L L C
 421 CTGCTGTCCC CGCGTCCGAT CTCCTACCTG AAAGGTTCCCT CCGGTGGTCC GCTGCTGTGC
 GACGACAGGG GCGCAGGCTA GAGGATGGAC TTTCCAAGGA GGCCACCAAGG CGACGACACG

P A G H A V G I F R A A V S T R G V A K
 481 CCGGCTGGTC ACGCTGTTGG TATCTTCCGT GCTGCTGTT CCACCCGTGG TGTTGCTAAA
 GGCCGACCAAGG TGCGACAACC ATAGAAGGCA CGACGACAAA GGTGGGCACC ACAACGATTT

A V D F I P V E S L E T T M R S P *
 541 GCTGTTGACT TCATCCCGGT TGAATCCCTG GAAACCACCA TGCGTTCCCC GTGA
 CGACAACTGA AGTAGGGCCA ACTTAGGGAC CTTTGGTGGT ACGCAAGGGGG CACT

FIG. 16

M K K K G S V V I V G R I N L S G D T A
 1 ATGAAAAAAA AAGGATCCGT TGTTATCGTC GGCGTATCA ACCTGTCCGG TGACACCGCT
 TACTTTTTT TTCCTAGGCA ACAATAGCAG CCGGCATAGT TGGACAGGCC ACTGTGGCGA

Y A Q Q T R G E Q G T Q K T S H T G R D
 61 TACGCTCAGC AGACTCGAGG TGAGCAGGGT ACCCAGAAGA CCTCCCACAC CGGTCGTGAC
 ATGCGAGTCG TCTGAGCTCC ACTCGTCCC TGGGTCTTCT GGAGGGTGTG GCCAGCACTG

K N Q V E G E V Q I V S T A T Q T F L A
 121 AAAAACCAAGG TTGAAGGTGA AGTCAGATC GTTCCACCG CTACCCAGAC CTTCTGGCT
 TTTTGGTCC AACCTCCACT TCAAGTCTAG CAAAGGTGGC GATGGGTCTG GAAGGACCGA

T S I N G V L W T V Y H G A G T R T I A
 181 ACCTCCATCA ACGGTGTCT GTGGACCCTT TACCACGGTG CTGGTACCCG TACCATCGCT
 TGGAGGTAGT TGCCACAAGA CACCTGGCAA ATGGTGCCAC GACCATGGGC ATGGTAGCGA

S P K G P V T Q M Y T N V D K D L V G W
 241 TCCCCGAAAG GTCCGGTTAC CCAGATGTAC ACCAACGTTG ACAAAAGACCT GGTTGGTTGG
 AGGGGCTTTC CAGGCCAATG GGTCTACATG TGGTTGCAAC TGGTCTGGA CCAACCAACC

Q A P Q G S R S L T P C T C G S S D L Y
 301 CAGGGCTCCGC AGGGTCCCCG TTCCCTGACC CCGTGCACCT GCGGTCCCTC CGACCTGTAC
 GTCCGAGGCG TCCCAAGGGC AAGGGACTGG GGCACGTGGA CGCCAAGGAG GCTGGACATG

L V T R H A D V I P V R R R G D S R G S
 361 CTGGTTACCC GTCACGCTGA CGTTATCCCG GTTCGTCGTC GTGGTGAATC CCGTGGTTCC
 GACCAATGGG CAGTGCAGACT GCAATAGGGC CAAGCAGCAG CACCACTGAG GGCACCAAGG

L L S P R P I S Y L K G S S G G P L L C
 421 CTGCTGTCCC CGCGTCCGAT CTCCTACCTG AAAGGTTCCCT CCGGTGGTCC GCTGCTGTGC
 GACGACAGGG GCGCAGGCTA GAGGATGGAC TTTCCAAGGA GGCCACCAAGG CGACGACACG

P A G H A V G I F R A A V S T R G V A K
 481 CCGGCTGGTC ACGCTGTTGG TATCTTCCGT GCTGCTGTT CCACCCGTGG TGTTGCTAAA
 GGCCGACCAAGG TGCGACAACC ATAGAAGGCA CGACGACAAA GGTGGGCACC ACAACGATTT

A V D F I P V E S L E T T M R S P *
 541 GCTGTTGACT TCATCCCGT TGAATCCCTG GAAACCACCA TGCGTTCCCC GTGA
 CGACAACTGA AGTAGGGCCA ACTTAGGGAC CTTGGTGGT ACGCAAGGGG CACT

FIG. 17

M K K K G S V V I V G R I N L S G D T A
 1 ATGAAAAAAA AAGGATCCGT TGTTATCGTC GGCGTATCA ACCTGTCCGG TGACACCGCT
 TACTTTTTT TTCCTAGGCA ACAATAGCAG CCGGCATAGT TGGACAGGCC ACTGTGGCGA

Y A Q Q T R G L L G C I I T S L T G R D
 61 TACGCTCAGC AGACTCGAGG TCTGCTGGGT TGCATCATCA CCTCCCTGAC CGGTCGTGAC
 ATGCGAGTCG TCTGAGCTCC AGACGACCCA ACGTAGTAGT GGAGGGACTG GCCAGCACTG

K N Q V E G E V Q I V S T A A Q T F L A
 121 AAAAACCAAGG TTGAAGGTGA AGTCAGATC GTTCCACCG CTGCTCAGAC CTTCTGGCT
 TTTTGGTCC AACTTCACT TCAAGTCTAG CAAAGGTGGC GACGAGTCTG GAAGGACCGA

T C I N G V C W T V Y H G A G T R T I A
 181 ACCTGCATCA ACGGTGTTG CTGGACCGTT TACCACGGTG CTGGTACCCG TACCATCGCT
 TGGACGTAGT TGCCACAAAC GACCTGGCAA ATGGTGCCAC GACCATGGGC ATGGTAGCGA

S P K G P V I Q M Y T N V D K D L V G W
 241 TCCCCGAAAG GTCCGGTTAT CCAGATGTAC ACCAACGTTG ACAAAAGACCT GGTTGGTTGG
 AGGGGCTTTC CAGGCCAATA GGTCTACATG TGGTGCAAC TGTTCTGGA CCAACCAACC

P A P Q G S R S L T P C T C G S S D L Y
 301 CCGGCTCCGC AGGGTTCCCG TCCCCTGACC CCGTGCACCT GC GGTTCCCTC CGACCTGTAC
 GGCGAGGCG TCCAAGGGC AAGGGACTGG GGCACGTGGA CGCCAAGGAG GCTGGACATG

L V T R H A D V I P V R R R G D S R G S
 361 CTGGTACCC GTCACGCTGA CGTTATCCCG GTTCGTCGTC GTGGTGACTC CCGTGGTCC
 GACCAATGGG CAGTGCAGT GCAATAGGGC CAAGCAGCAG CACCACTGAG GGCACCAAGG

L L S P R P I S Y L K G S S G G P L L C
 421 CTGCTGTCCC CGCGTCCGAT CTCCTACCTG AAAGGTTCTT CCGGTGGTCC GCTGCTGTGC
 GACGACAGGG GCGCAGGCTA GAGGATGGAC TTTCCAAGGA GGCCACCAAGG CGACGACACG

P A G H A V G I F R A A V C T R G V A K
 481 CCGGCTGGTC ACGCTGTTGG TATCTTCCGT GCTGCTGTT GCACCCGTGG TGTTGCTAAA
 GGCGACCAAG TCGACAAACC ATAGAAGGCA CGACGACAAA CGTGGGCACC ACAACGATTT

A V D F I P V E S L E T T M R S P *
 541 GCTGTTGACT TCATCCCGT TGAATCCCTG GAAACCACCA TGCCTTCCCC GTGA
 CGACAACGTA AGTAGGGCCA ACTTAGGGAC CTTGGTGGT ACGCAAGGGG CACT

FIG. 18